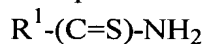


WHAT IS CLAIMED IS:

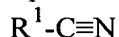
1. A process for the preparation of a compound of formula (I)



(I), wherein

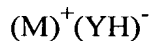
$R^1$  is selected from the group consisting of heteroaryl, phenyl, or phenyl substituted with one, two, three, or four substituents independently selected from the group consisting of  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl,  $C_2$ - $C_6$ -alkynyl, -OH, -F, -Cl, -Br, -I, -NH<sub>2</sub> and -NO<sub>2</sub>;

the process comprising reacting a compound having formula (II)



(II), with a base and H<sub>2</sub>S.

2. The process of Claim 1, wherein the base is a compound of formula (III)



(III), wherein

M is sodium, potassium, lithium, or -NH<sub>4</sub>; and

Y is oxygen or sulfur.

3. The process of Claim 1, wherein the process is conducted under a pressure of at least 10 psi.

4. The process of Claim 1, wherein the process is conducted at a temperature of about 0°C to about 150°C.

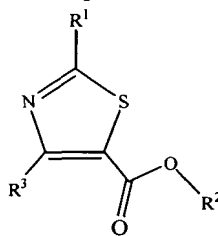
5. The process of Claim 1, wherein the process is conducted in a solvent.

6. The process of Claim 5, wherein the solvent is water.

7. The process of Claim 1, wherein  $R^1$  is phenyl substituted with one -OH substituent.

8. The process of Claim 1, wherein M is sodium and Y is sulfur.

9. The process of Claim 1, wherein M is sodium and Y is oxygen.
10. A process for the preparation of 4-hydroxybenzene carbothioamide, the process comprising reacting 4-hydroxybenzonitrile and sodium hydrogen sulfide under a pressure of at least 10 psi at a temperature of about 0°C to about 150°C in a solvent.
11. The process of Claim 10, wherein the pressure is 60 psi, the temperature is 70°C, and the solvent is water.
12. A process for the preparation of a compound of formula (IV)



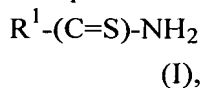
(IV), wherein

R<sup>1</sup> is selected from the group consisting of heteroaryl, phenyl, or phenyl substituted with one, two, three, or four substituents independently selected from the group consisting of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl, -OH, -F, -Cl, -Br, -I, -NH<sub>2</sub> and -NO<sub>2</sub>;

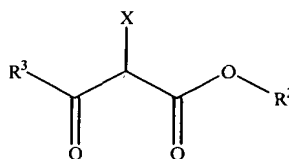
R<sup>2</sup> is selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, and C<sub>2</sub>-C<sub>6</sub>-alkynyl; and

R<sup>3</sup> is selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, and C<sub>2</sub>-C<sub>6</sub>-alkynyl;

the process comprising reacting a compound having formula (I)



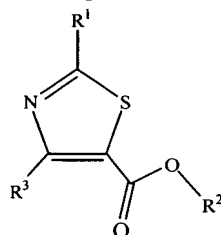
with a compound having formula (V)



(V), wherein

X is selected from the group consisting of -Cl, -Br, -I, and -F.

13. The process of Claim 12, wherein the process is conducted at a temperature of about 0°C to about 150°C.
14. The process of Claim 12, wherein the process is conducted in a solvent.
15. The process of Claim 14, wherein the solvent is ethanol.
16. The process of Claim 12, wherein R<sup>1</sup> is phenyl substituted with one -OH substituent.
17. The process of Claim 12, wherein R<sup>2</sup> is ethyl.
18. The process of Claim 12, wherein R<sup>3</sup> is methyl.
19. The process of Claim 12, wherein X is -Cl.
20. The process for the preparation of ethyl 2-(4 hydroxyphenyl)-4-methyl-1, 3-thiazole-S-carboxylate, the process comprising reacting 4-hydroxybenzene carbothiomide with ethyl-2-chloroacetoacetate at a temperature of about 0°C to about 150°C in an organic solvent.
21. The process of Claim 20, wherein the temperature is 80°C and the organic solvent is ethanol.
22. A process for the preparation of a compound of formula (IV)



(IV), wherein

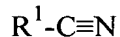
R<sup>1</sup> is selected from the group consisting of heteroaryl, phenyl, or phenyl substituted with one, two, three, or four substituents independently selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl, -OH, -F, -Cl, -Br, -I, -NH<sub>2</sub> and -NO<sub>2</sub>;

R<sup>2</sup> is selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, and C<sub>2</sub>-C<sub>6</sub>-alkynyl; and

$R^3$  is selected from the group consisting of hydrogen,  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl, and  $C_2$ - $C_6$ -alkynyl;

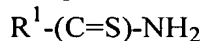
the process comprising the steps of:

- (a) reacting a compound having formula (II)



(II),

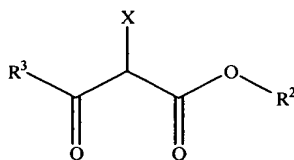
with a base and  $H_2S$  to provide a compound of formula (I)



(I);

and

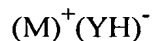
- (b) reacting the product of step (a) with a compound having formula (V)



(V), wherein

X is selected from the group comprising -Cl, -Br, -I, and -F.

23. The process of Claim 22, wherein the base in step (a) is a compound of formula (III)



(III), wherein

M is sodium, potassium, lithium, or  $-NH_4$ ; and

Y is oxygen or sulfur.

24. The process of Claim 22, wherein step (a) is conducted under a pressure of at least 10 psi.

25. The process of Claim 22, wherein steps (a) and (b) are conducted in solvents.

26. The process of Claim 22, wherein steps (a) and (b) are conducted at a temperature of about  $0^\circ C$  to about  $150^\circ C$ .

27. The process of Claim 22, which is conducted as a continuous process.

28. A process for the preparation of ethyl 2-(4 hydroxyphenyl)-4-methyl-1, 3-thiazole-S-carboxylate,

the process comprising the steps of:

- (a) reacting 4-hydroxybenzonitrile, sodium hydroxide, and hydrogen sulfide under a pressure of at least 10 psi at a temperature of about 0°C to about 150°C in a solvent; and
- (b) reacting the product of step (a) and ethyl-2-chloroacetoacetate at a temperature of about 0°C to about 150°C in a solvent.

29. The process of Claim 29, wherein in (a) the pressure is 60 psi, the temperature is 70°C, and the solvent is water, and in (b) the temperature is 80°C and the solvent is ethanol.

30. The process of Claim 29, wherein the solvent used in (a) is the same solvent used in (b).

31. The process of Claim 29, wherein in (a) the pressure is 60 psi, the temperature is 70°C, and the solvent is ethanol, and in (b) the temperature is 80°C and the solvent is ethanol.